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Nota di contenuto	An Overview of Metal Clusters and Their Reactivity -- Instrumentation for Cluster Science -- Metal Cluster Reacting with Oxygen -- Halogenation of Metal Clusters -- The Reactivity with Hydrogen and Nitrogen -- Cooperative Active-Sites Mechanism .
Sommario/riassunto	This book discusses current techniques and instrumentation for cluster chemistry. It addresses both the experimental and theoretical aspects of gas-phase metal cluster reactivities, especially those pertaining to pollution removal, energetic reactions and corrosion and anticorrosion. These metal cluster systems have attracted enormous interest as they display a completely new class of physical, chemical, electronic, magnetic and catalytic properties. As these properties change with size and composition, it can thus be understood how their nature evolves from atoms to bulk solids. The book offers readers a basic understanding of the structural chemistry and reactivity of metal clusters in both gas-phase and wet chemistry. Further, the lessons they learn here regarding metal cluster chemistry will prepare researchers for the study of condensed phase dynamics that pertain to wet chemical synthesis, soft-landing deposition and cluster assembly.

